# UNITED STATES MARINE CORPS **Basic Officer Course** The Basic School

Marine Corps Combat Development Command Quantico, Virginia 22134-5019

B5703

# FIELD PROTECTIVE MASK (FPM)

## Supplemental Reading

1. Capabilities. The M40 chemical-biological mask, when properly worn, protects against field concentrations of all known chemical and biological agents in vapor or aerosol form. A canister that can be screwed in to either cheek of the mask removes the agents from the air entering the mask. It is not designed for radiological protection. However, when worn properly, it provides added alpha and beta dust inhalation protection.

Terminology
a. M40 field protective mask (FPM) (See Figures 1, 2 and 3)
(1) Facepiece
(2) Eyelenses
(3) Head harness
(4) Nosecup assembly
(5) Nosecup valve seats
(6) Valve disk
(7) Internal drinking tube
(8) Outlet valve cover
(9) Outlet valve disk
(10) Outlet valve
(11) External drinking tube
(12) Voicemitters
(13) Airflow deflector
(14) Valve body

(15) Inlet valve disk

- b. Major Components
  - (1) Canister. Filters out toxic chemical and biological agents and other particles from contaminated air.
- (2) <u>Carrier</u>. Made of mildew-resistant, water-repellent, polyethylene coated nylon. It is lined and reinforced at critical locations to protect the mask. It has adjustable straps and is also designed to be attached to the war belt.
- (3) Hood. The hood provides protection to the head and neck against liquid chemical agents. Made of lightweight butyl rubber coated fabric.

## 3. Fitting and Adjusting the M40 FPM. To fit and adjust your mask:

- a. Loosen head harness and fold head harness over front of facepiece.
- b. Place chin in the chin pocket and slip head harness over head while holding facepiece against face.
- c. Hold facepiece tightly against chin, making sure not to cover outlet valve, center the head harness pad on back of head.
- d. Tug forehead straps until buckles feel snug and the repeat the procedure for the cheek straps. Do not tighten too much!
- e. Release facepiece pull temple straps until snug.
- f. Check to make sure eyes are centered.
- g. As soon as you are issued a mask you should fit it and keep it fitted. You should practice putting your mask on while lying on the ground, squatting in a fighting position, and in other positions that your job requires.

## 4. Donning the Field Protective Mask. In donning the field protective mask:

- a. First: Place your chin in.
- b. Second: Cover openings at bottom of outlet valve and breathe out hard so that air escapes around the edges of facepiece.
- c. Third: Cover inlet port of canister and breath in. Facepiece should collapse against your face, and remain so while you hold your breath. If it does, you have an airtight seal. If it does not collapse check for matter between face piece and your face.
  - d. Grasp tab and pull head harness over your head after establishing an airtight seal.
- 5. **Automatic Masking of the Field Protective Mask**. Whenever masking always stop breathing, don and clear the FPM, sound the alarm "GAS," and continue the mission. If enemy chemical attack is imminent or has been initiated, unmasked personnel automatically mask in the following situations:
  - a. Attack by aircraft spray.
  - b. Smoke or mist of unknown source is observed.
  - c. A suspicious odor or liquid is present.
  - d. Personnel have symptoms of an agent.
  - e. They are warned or ordered to do so.

### 6. Cleaning Your Mask

- a. The only authorized cleaning agent for your FPM is WARM SOAPY WATER.
- b. Remove the canister before cleaning the mask. Clean the mask inside and out, using a clean cloth dipped in the soapy water.
  - c. Rinse by wiping with a clean cloth that has been dipped in warm clear water.

- d. Either wipe the facepiece with a clean, lint free cloth or air-dry.
- 7. **Initiating Unmasking Procedures**. All personnel must wait for the commander's order for unmasking. After a chemical attack DO NOT UNMASK UNTIL AUTHORIZED BY YOUR IMMEDIATE COMMANDER. In the absence of command guidance, the procedures described below should be followed.
- a. Procedure when a detector kit is available. Use the chemical agent detector kit, M256A1, to test for the presence or absence of chemical agents. After determining the absence of agents, two or three individuals unmask for five minutes, then remask. Check for chemical agent symptoms. If no chemical agent symptoms appear in 10 minutes, the remainder of the troops may safely unmask. It should be noted that bright light will cause contraction of the pupils which could be erroneously interpreted as a nerve agent symptom.
- b. Procedure when no detector kit is available. As an emergency field expedient when no detector kit can be obtained, the following procedure will be used:
  - (1) Select two or three individuals.
- (2) Have each take a deep breath, hold it, break the seal of the mask, and keep their eyes wide open for 15 seconds.
- (3) Have each clear their mask, reestablish the seal and observe the individuals for 10 minutes looking for any symptoms.
  - (4) The individuals again break the seal, take two or three breaths, and clear and reseal the mask.
  - (5) Wait another 10 minutes, watching each individual very closely for any symptoms.
  - (6) If no symptoms have developed, these same individuals unmask for five minutes and then remask.
- (7) After 10 more minutes, if no symptoms have appeared, the remainder of the group can safely unmask, after you have requested from higher to go all clear. However, remain alert for the appearance of any chemical symptoms. If symptoms occur, resume the wearing of masks. Remember, once completed, always request authorization from your immediate commander to give the command to unmask.

References: Operators Manual for CB Mask; Field, M40 TM 3-4240-300-10-1





